

Parker-Davis Project

FY 2012 Status &
Preliminary FY 2013
Annual Operating Plans
May 3, 2012

Agenda

- Introduction
- Hydrology Update
- FY 2011 AOP Estimates Presented 5/5/11 & Final Results
- Status of FY 2012 Annual Operating Plan
- Preliminary FY 2013 Annual Operating Plan
- FY 2013 Purchase Power
- Next Steps

Hydrology Update For WY 2012 & Actual WY 2011 Results

	WY 2012		WY 2011	
<u>Lake Powell</u>	<u>(maf)</u>	<u>%</u>	<u>(maf)</u>	<u>%</u>
Unreg Inflow (Norm=12.1)	6.8	56%	16.0	132%
Apr-Jul Unreg Inflow (Norm=7.9)	3.5	49%	12.5	158%
Storage (Max=24.3)	15.1	62%	17.6	74%
Releases to Lake Mead (Norm=8.23)	9.5	115%	12.5	152%
	<u>(ft.)</u>		<u>(ft.)</u>	
Max Lake Elev.	3650 (Oct)		3661 (Jul)	
Min Lake Elev.	3633 (Sep)		3611 (Mar)	
Year-End Lake Elev.	3633		3653	

Water Year Snowpack and Precipitation as of May 2, 2012

Colorado River Basin above Lake Powell

Water Year

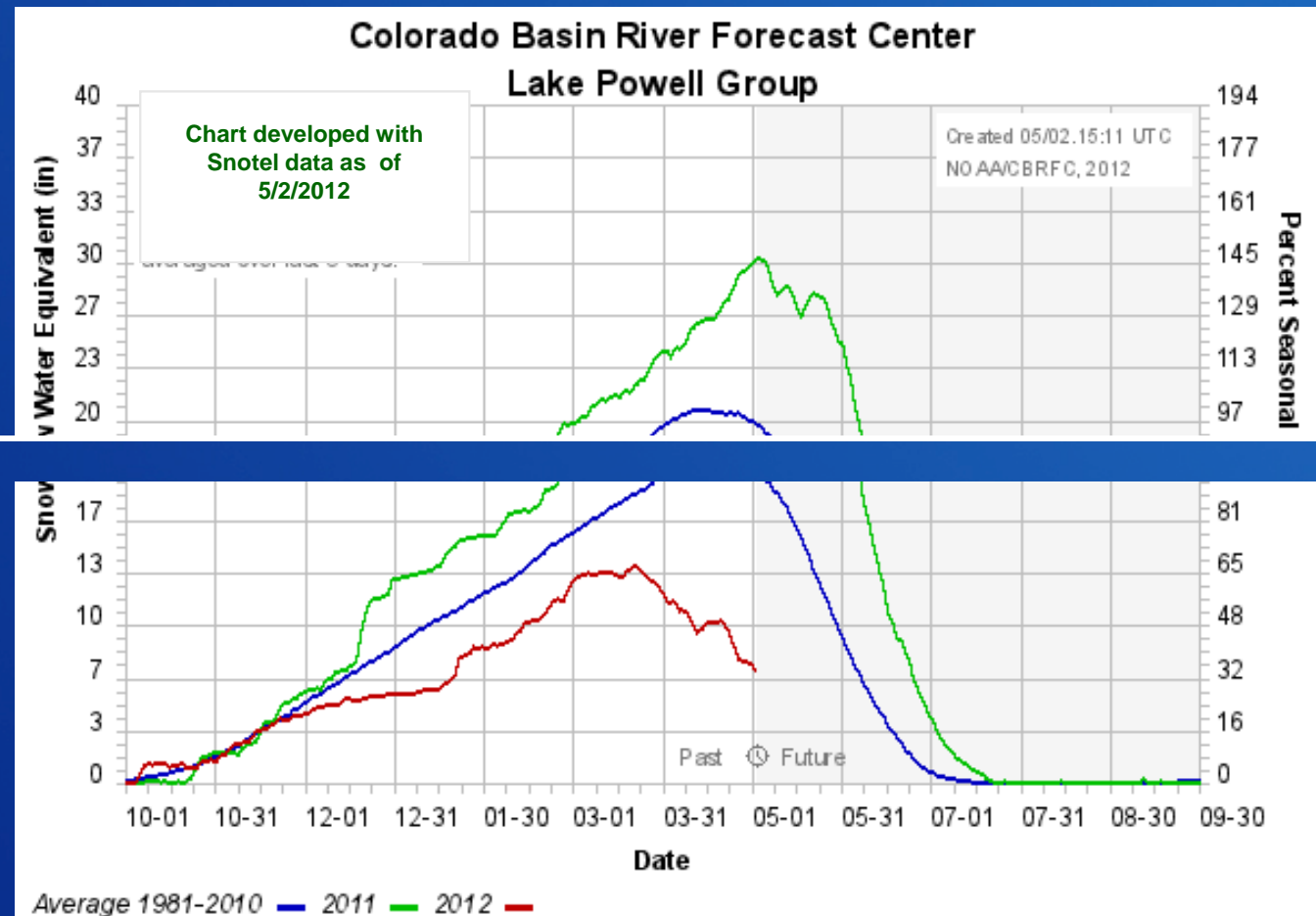
Precipitation
(year-to-date)

76%

Current Snowpack

26%

On June 20, 2011:
Precipitation – 127%
Snowpack – 336%



Source: CBRFC & NRCS

RECLAMATION

Hydrology Update For WY 2012 & Actual WY 2011 Results

	WY 2012		WY 2011	
<u>Lake Mead</u>	<u>(maf)</u>	<u>%</u>	<u>(maf)</u>	<u>%</u>
Side Inflow (Norm=1.3)	0.73	56%	1.16	89%
Storage (Max=26.1)	13.1	50%	13.0	50%
Downstream Releases	9.5	--	9.8	--
	<u>(ft.)</u>		<u>(ft.)</u>	
Max Lake Elev.	1134 (Jan)		1116 (Sep)	
Min Lake Elev.	1114 (Sep)		1082 (Nov)	
Year-End Lake Elev.	1114		1116	

Lake Powell & Lake Mead

Operational Diagrams and Current Conditions

Lake Powell			Lake Mead		
Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) ¹	Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) ¹
3,700	Equalization Tier Equalize, avoid spills or release 8.23 maf	24.3	1,220	Flood Control Surplus or Quantified Surplus Condition Deliver > 7.5 maf	25.9
3,636 - 3,636 (2008-2026)	3.636 5/2/12	15.51 5/2/12	1,200 (approx.) ²	Domestic Surplus or ICS Surplus Condition Deliver > 7.5 maf	22.9 (approx.) ²
3,575	Upper Elevation Balancing Tier³ Release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf	9.5	1,145		15.9
3,525	Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	5.9	1,105	1,124 5/2/12 Normal or ICS Surplus Condition Deliver ≥ 7.5 maf	13.97 5/2/12 11.9
3,490	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	4.0	1,075		9.4
3,370		0	1,050	Shortage Condition Deliver 7.167 ⁴ maf	7.5
			1,025	Shortage Condition Deliver 7.083 ⁵ maf	5.8
			1,000	Shortage Condition Deliver 7.0 ⁶ maf Further measures may be undertaken ⁷	4.3
			895		0

Diagram not to scale

¹ Acronym for million acre-feet

² This elevation is shown as approximate as it is determined each year by considering several factors including Lake Powell and Lake Mead storage, projected Upper Basin and Lower Basin demands, and an assumed inflow.

³ Subject to April adjustments which may result in a release according to the Equalization Tier

⁴ Of which 2.48 maf is apportioned to Arizona, 4.4 maf to California, and 0.287 maf to Nevada

⁵ Of which 2.40 maf is apportioned to Arizona, 4.4 maf to California, and 0.283 maf to Nevada

⁶ Of which 2.32 maf is apportioned to Arizona, 4.4 maf to California, and 0.280 maf to Nevada

⁷ Whenever Lake Mead is below elevation 1,025 feet, the Secretary shall consider whether hydrologic conditions together with anticipated deliveries to the Lower Division States and Mexico is likely to cause the elevation at Lake Mead to fall below 1,000 feet. Such consideration, in consultation with the Basin States, may result in the undertaking of further measures, consistent with applicable Federal law.

Colorado River Basin Storage

(as of May 2, 2012)

Current Storage	Percent Full	MAF	Elevation (Feet)
Lake Powell	64%	15.51	3,636
Lake Mead	53%	13.97	1,124
Total System Storage*	61%	37.18	NA

***Total system storage was 31.57 maf or 53% this time last year
(Includes All Upper & Lower Basin Reservoirs)**

Lake Mead

1,219.64 ft

26.12 maf

Surplus Conditions

95.6 ft

1,145 ft

16.2 maf

Normal or ICS Surplus Conditions
(Presently)

1,124 ft

13.97 maf
(53% of
Capacity)

74 ft

1,075 ft

Shortage Conditions

1,050 ft

Min Power Pool
7.5 maf

“Rough Zone”

895 ft

860 ft

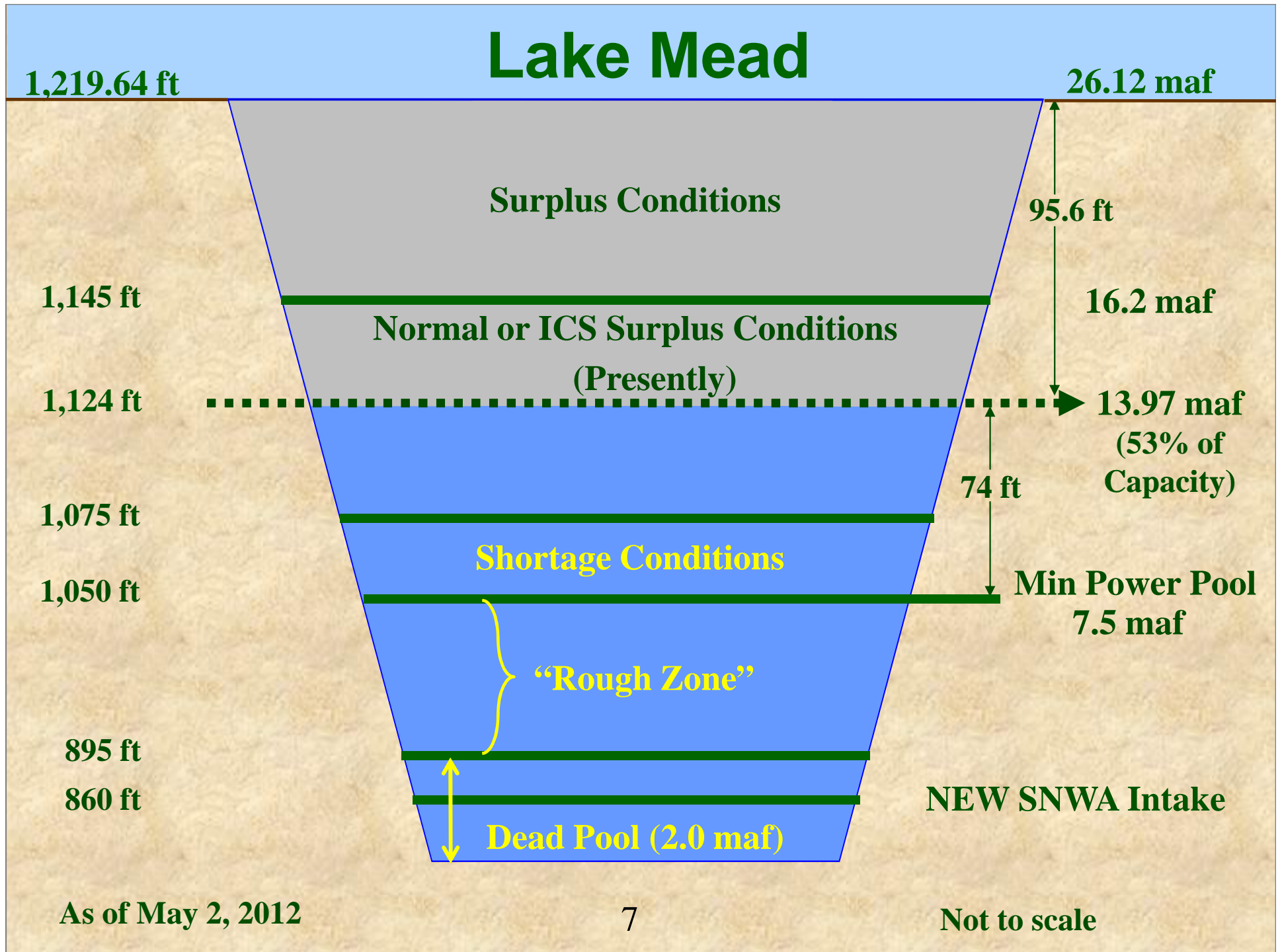
NEW SNWA Intake

Dead Pool (2.0 maf)

As of May 2, 2012

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Not to scale



Operating Crit.	<u>Powell</u>	<u>%</u>	<u>Mead</u>	<u>%</u>
	Upper Elev Bal Tier		Norm / Intent Created Surplus	
Inflow (maf)	10.2	89	.9	69
Releases (maf)	8.23	100	9.4	--
EOY Storage (maf)	16.6	68	11.9	46
Max Elev (ft)	3648 (jul)		1120 (jan)	
Min Elev (ft)	3623 (mar)		1102 (sep)	
EOY Elev (ft)	3645		1102	

FY2011 AOP Final Results

Parker - Davis Project

All Values is GWh

Prior Year Balance		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Resources														
Parker Generation		31.4	30.4	19.7	26.8	29.3	47.4	54.4	47.9	49.9	51.6	46.1	39.4	474.3
MWD's Parker Share		-14.4	-14.2	-18.3	-10.2	-13.2	-18.0	-26.2	-25.4	-23.5	-23.3	-17.8	-11.5	-216.0
Davis Generation		92.1	77.2	67.8	63.3	73.6	123.0	131.6	120.3	120.6	119.3	103.5	90.2	1182.5
Net Generation		109.1	93.4	69.2	79.9	89.7	152.4	159.8	142.8	147.0	147.6	131.8	118.1	1440.8
Purchases for PDP		0.0	0.0	10.5	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6
Total Resources:		109.1	93.4	79.7	93.0	89.7	152.4	159.8	142.8	147.0	147.6	131.8	118.1	1464.3
Loads														
Total PDP Firm Load		82.1	78.2	80.4	79.8	73.4	146.5	144.8	149.0	146.2	151.3	149.9	142.6	1424.5
Excess		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surplus Sales		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PDP / BA Deviation	36.3	2.2	9.8	-1.2	11.4	-1.0	-5.2	1.2	-1.9	8.7	15.6	1.5	-4.2	73.2
Hoover Bank	-5.5	24.8	5.4	0.6	1.7	17.3	11.1	13.8	-4.4	-7.9	-19.3	-19.7	-20.4	-2.5
Total Loads:		109.1	93.4	79.7	93.0	89.7	152.4	159.8	142.8	147.0	147.6	131.8	118.1	1464.3

+ values represent energy from PDP

- values represent energy to PDP

May 3, 2012

FY2011 AOP (presented 5/5/11)

Parker - Davis Project

Actuals GWh

Estimates GWh

Prior Year Balance		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Resources														
Parker Generation		31.4	30.4	19.7	26.8	29.3	47.4	51.5	46.3	45.3	48.8	41.4	34.5	452.8
MWD's Parker Share		-14.4	-14.2	-18.3	-10.2	-13.2	-18.0	-25.7	-23.1	-22.7	-24.4	-20.7	-17.3	-222.1
Davis Generation		92.1	77.2	67.8	63.3	73.6	123.0	132.7	124.9	118.7	112.2	98.8	87.0	1171.3
Net Generation		109.1	93.4	69.2	79.9	89.7	152.4	158.5	148.0	141.4	136.6	119.5	104.3	1401.9
Purchases for PDP		0.0	0.0	10.5	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6
Total Resources:		109.1	93.4	79.7	93.0	89.7	152.4	158.5	148.0	141.4	136.6	119.5	104.3	1425.5
Loads														
Total PDP Firm Load		82.1	78.2	80.4	79.8	73.4	146.5	144.5	148.7	145.7	151.0	149.6	142.4	1422.5
Excess		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surplus Sales		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PDP / BA Deviation	36.3	2.2	9.8	-1.2	11.4	-1.0	-5.2	0.0	-0.7	-1.1	-3.7	-5.3	-7.3	33.8
Hoover Bank	-5.5	24.8	5.4	0.6	1.7	17.3	11.1	13.9	0.0	-3.3	-10.7	-24.9	-30.9	0.0
Total Loads:		109.1	93.4	79.7	93.0	89.7	152.4	158.5	148.0	141.4	136.6	119.5	104.3	1425.5

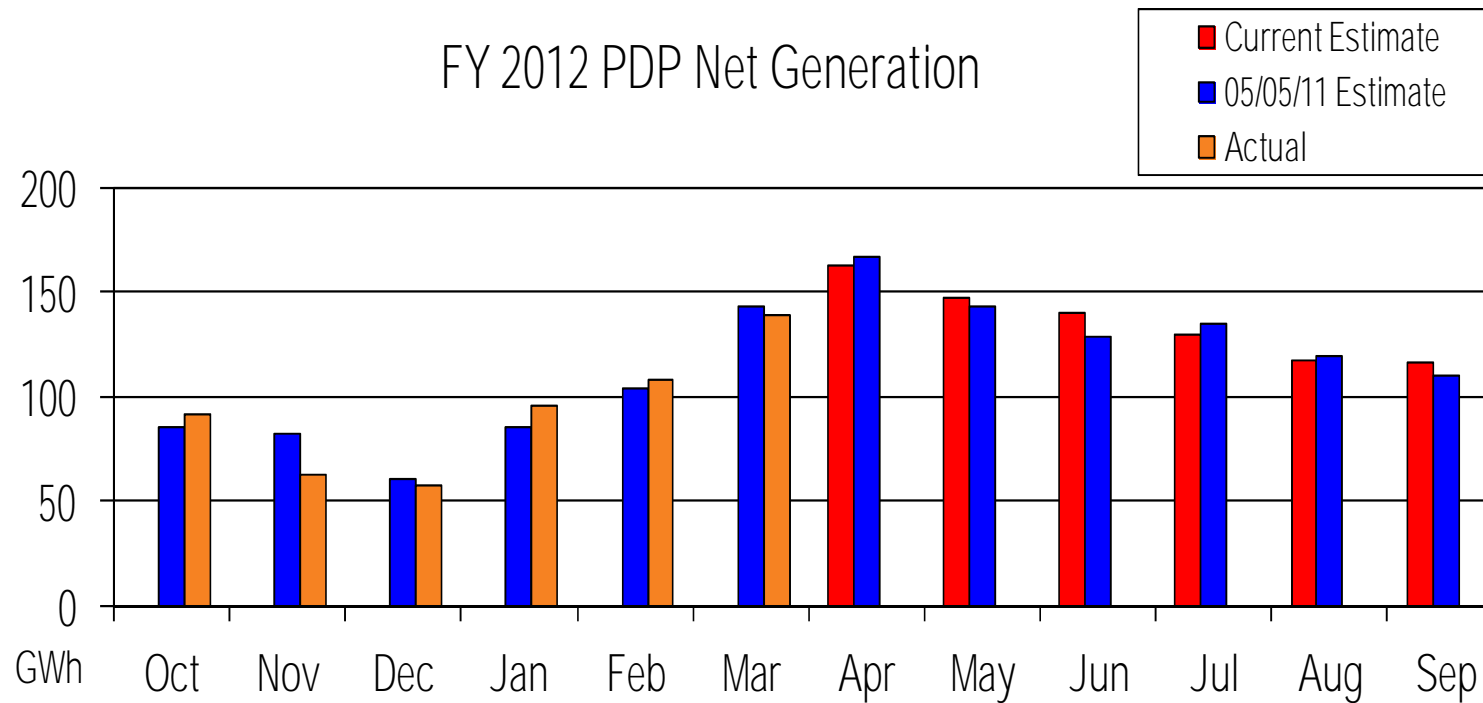
+ values represent energy from PDP

- values represent energy to PDP

Status FY2012 AOP

Current Est. Total Gen 1366.7 GWh

05/05/11 Est. Total Gen 1364.9 GWh



Current Status FY2012 AOP

Parker - Davis Project

Actuals GWh

Estimates GWh

Prior Year Balance		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Resources														
Parker Generation		31.5	22.1	17.7	25.6	35.118	48.8	51.84	45.25	45.7	48.2	42.4	36.8	451.0
MWD's Parker Share		-14.4	-16.4	-8.0	-6.8	-17.6	-26.6	-26.0	-22.6	-22.9	-24.1	-21.2	-18.4	-224.8
Davis Generation		74.4	57	48.1	77.2	90.8	117.4	136.6	121.6	117.5	106.2	96.2	97.5	1140.5
Net Generation		91.5	62.7	57.9	96.0	108.3	139.6	162.5	144.2	140.4	130.3	117.4	115.9	1366.7
Purchases for PDP		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Resources:		91.5	62.7	57.9	96.0	108.3	139.6	162.5	144.2	140.4	130.3	117.4	115.9	1366.7
Loads														
Total PDP Firm Load		82.2	78.5	78.9	79.4	73.4	146.5	144.6	148.7	147.9	151.0	149.6	142.8	1423.5
Excess		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surplus Sales		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PDP / BA Deviation	73.2	8.1	-25.4	-17.7	-5.7	3.4	1.4	-10.0	-0.6	-1.1	-3.0	-4.7	-3.9	13.8
Hoover Bank	-2.5	1.3	9.6	-3.3	22.3	31.5	-8.2	27.9	-3.8	-6.5	-17.7	-27.5	-23.0	0.0
Total Loads:		91.5	62.7	57.9	96.0	108.3	139.6	162.5	144.2	140.4	130.3	117.4	115.9	1366.7

+ values represent energy from PDP

- values represent energy to PDP

May 3, 2012

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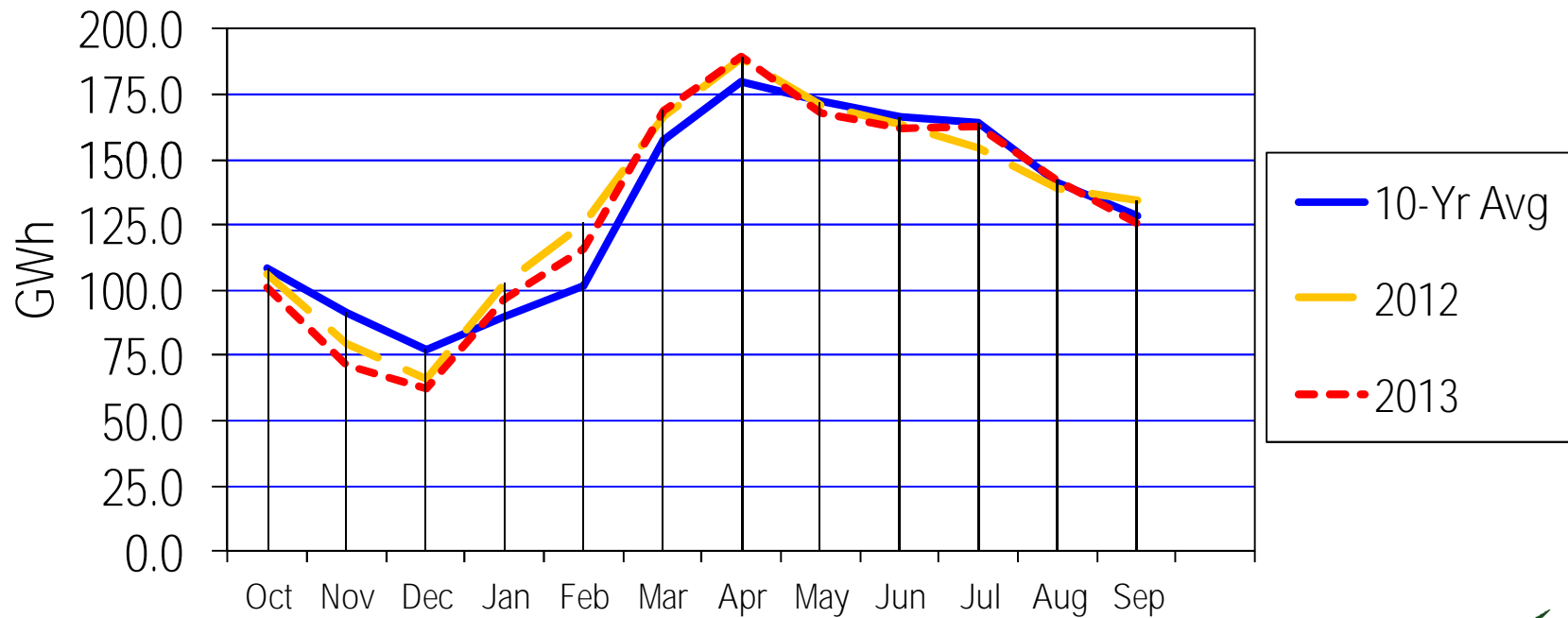


Current Generation Energy Bank Balance

- Southwest Operating Group (SWOG)
as of 04/30/12: \$2.4M

USBR Generation Projections

Parker-Davis Generation



(2012: Actual Oct – Mar)

Preliminary FY 2013 AOP

- No PDP Excess Energy or Surplus Sales Expected
- A total of 5,485 MWh's of FES exchange requests will be accommodated through the Resource Integration Exchange Program (Stage 1 PDP)
- No exchanges were possible between BCP & PDP contractors (Stage 2)
- Resource Integration Exchange Program has a net zero impact on energy obligation for PDP

Preliminary FY 2013 AOP

Parker - Davis Project

Estimates GWh

Prior Year Balance		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Resources														
Parker Generation		29.3	24.5	17.4	22.8	29.7	46.2	52.7	46.2	45	48.4	40.9	34.2	437.3
MWD's Parker Share		-14.7	-12.3	-8.7	-11.4	-14.9	-23.1	-26.4	-23.1	-22.5	-24.2	-20.5	-17.1	-218.7
Davis Generation		71.6	46.9	45.3	73.4	86	122.6	136.6	121.7	116.7	114.1	101.3	91.4	1127.6
Net Generation		86.3	59.2	54.0	84.8	100.9	145.7	163.0	144.8	139.2	138.3	121.8	108.5	1346.3
Purchases for PDP		0.0	9.7	13.3	0.0	0.0	0.4	0.0	2.0	3.2	6.1	13.3	16.9	65.0
Total Resources:		86.3	68.8	67.3	84.8	100.9	146.1	163.0	146.8	142.4	144.4	135.1	125.4	1411.2
Loads														
Total PDP Firm Load		82.3	78.6	79.9	79.4	73.4	146.6	144.9	149.0	146.0	151.2	149.8	144.0	1425.0
Excess		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surplus Sales		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PDP / BA Deviation	13.8	3.1	-2.1	-2.3	1.0	0.0	-0.1	0.0	-0.6	-1.0	-2.0	-4.3	-5.4	0.0
Hoover Bank	0.0	0.8	-7.6	-10.4	4.4	27.5	-0.3	18.0	-1.6	-2.5	-4.8	-10.4	-13.2	0.0
Total Loads:		86.3	68.8	67.3	84.8	100.9	146.1	163.0	146.8	142.4	144.4	135.1	125.4	1411.2

+ values represent energy from PDP

- values represent energy to PDP

May 3, 2012

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FY 2013 Purchase Power

- **Projected Purchases:**
 - Current Projections Indicate The Need For Purchases Of 65 GWhs in FY2013
 - Cost Of Purchased Power Is Estimated At \$2.8M for Energy and \$2.4M for Reserves
 - Historical Spin and Non-Spin Counterparties
 - LADWP, CRSP, AEPCO, & SRP
 - A Combination of Term & Spot Market Purchases Will Be Utilized To Meet These Needs

FY 2013 AOP – Next Steps

- Continue dialogue with customers for purchase power requirements
- July 19, 2012: PDP AOF Funding Board Meeting
- February 13-14, 2013: PDP AOF Planning Board Meeting
- Open Discussion

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